Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings of claims in the application.

Listings of Claims:

1. (Currently Amended) A thin-film magnetic head comprising an upper magnetic core layer, a lower magnetic core layer arranged to be opposed to the upper magnetic core layer, an electrically conductive coil layer sandwiched between the upper magnetic core layer and the lower magnetic core layer, a first insulator layer, sandwiched between the lower magnetic core layer and the electrically conductive coil layer, for electrically insulating the lower magnetic core layer from the electrically conductive coil layer, a second insulator layer, sandwiched between the upper magnetic core layer and the electrically conductive coil layer, for electrically insulating the upper magnetic core layer from the electrically conductive coil layer,

wherein the first insulator layer is arranged on the lower magnetic core layer except a [the] front end portion of the lower magnetic core layer facing a [the] front end portion of the upper magnetic core layer, a lower magnetic pole layer having a thickness equal to that of the first insulator layer is arranged in continuity with the end of the first insulator layer on the front end portion of the lower magnetic core layer between the upper magnetic core layer and the lower magnetic core layer, the front end portion of the upper magnetic core layer is arranged on a gap layer on the lower magnetic pole layer, and the second insulator layer is positioned behind the lower magnetic pole layer and close to a [the] back end of the upper magnetic core layer.

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wherein the upper magnetic core layer comprises a narrow-width pole region with the end portion thereof formed on the gap layer on the lower magnetic pole layer, and a yoke region being wider in width than the pole region, arranged in continuity with a back end of the pole region,

wherein the width of the front end portion of the upper magnetic core layer combines with the width of the lower magnetic pole layer and the width of the gap layer to constitute the track width, and

wherein the upper magnetic core layer is provided so as to cover the second insulator layer.

2. (Original) A thin-film magnetic head according to claim 1, wherein the first insulator layer comprises a recess, for receiving the electrically conductive coil layer, arranged at a predetermined distance from the lower magnetic pole layer, between the lower magnetic pole layer and the back end portion of the upper magnetic core layer.

3. (Original) A thin-film magnetic head according to claim 1, wherein the upper magnetic core layer comprises a narrow-width pole region with the end portion thereof formed on the gap layer on the lower magnetic pole layer, and a yoke region being wider in width than the pole region, arranged in continuity with the back end of the pole region, and

wherein the back end of the pole region is opposed to the first insulator layer between the lower magnetic pole layer and the recess.

4. (Original) A thin-film magnetic head according to claim 1, wherein each of the upper magnetic core layer and the lower magnetic pole layer is of a

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dual-layer structure, the bottom layer of the upper magnetic core layer is arranged on the gap layer on the top layer of the lower magnetic pole layer, and the saturation flux density of the bottom layer of the upper magnetic core layer and the top layer of the lower magnetic pole layer is set to be higher than the saturation flux density of the top layer of the upper magnetic core layer and the bottom layer of the lower magnetic pole layer.

5. (Original) A thin-film magnetic head according to claim 1, wherein the gap layer extends between the electrically conductive coil layer and the first insulator layer.

6. (Original) A thin-film magnetic head according to claim 1, wherein the lower magnetic core layer also serves as a top shield layer of a magnetoresistive head for reading information from a magnetic recording medium.

7. (Currently Amended) A method for manufacturing a thin-film magnetic head, comprising

a step of forming a lower magnetic pole layer on a lower magnetic core layer,

a step of forming a first insulator layer on the lower magnetic core layer in a manner such that the first insulator layer is arranged in continuity with a [the] back end of the lower magnetic pole layer,

a step of polishing the first insulator layer so that the thickness of the first insulator layer is equal to the thickness of the lower magnetic pole layer,

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a step of forming a recess in the first insulator layer, a step of forming a gap layer on the lower magnetic pole layer and the first insulator layer in a manner such that the gap layer extends into the recess,

a step of forming an electrically conductive coil layer on the gap layer formed in the recess,

a step of forming a second insulator layer for covering the electrically conductive coil layer on the gap layer so that a [the] front end portion of the second insulator layer is positioned behind the lower magnetic pole layer, and

a step of forming, by exposure and development, a resist pattern for forming an upper magnetic core layer both on the second insulator layer and on a [the] front end portion of the gap layer,

wherein the upper magnetic core layer includes a narrow-width pole region with the end portion thereof formed on the gap layer on the lower magnetic pole layer, and a yoke region wider in width than the pole region, arranged in continuity with a back end of the pole region..

8. (Currently Amended) A thin-film magnetic head comprising a lower magnetic core layer, a lower magnetic pole layer formed on the lower magnetic core layer, a non-magnetic gap layer formed at least on the lower magnetic pole layer, an upper magnetic core layer on the gap layer in a surface facing a recording medium, and a coil layer formed behind the lower magnetic layer in the direction of height for inducing a recording magnetic field in the lower magnetic core layer and the upper magnetic core layer;

wherein the upper magnetic core layer comprises a front end region having a track width and exposed on the surface facing the recording medium, and a backward region extending backward from a [the] back end of the front

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end region in the direction of height, the backward region having the width widening as the upper magnetic core layer runs backward;

a planarizing insulator layer is formed to keep in the direction of height a flat surface at the same level in continuity with the top surface of the lower magnetic pole layer, wherein the planarizing insulator layer has a flat surface remaining constant in level and a downwardly inclined surface so that the planarizing insulator layer is gradually thinner toward the backward end thereof;

the flat surface is higher in level than a coil layer formation surface on which the coil layer is formed and lower in level than a top surface of the coil layer;

the width of a front end portion of the upper magnetic core layer combines with the width of the lower magnetic pole layer and the width of the gap layer to constitute the track width; and

the upper magnetic core layer is provided so as to cover the second insulator layer.

9. (Original) A thin-film magnetic head according to claim 8, wherein the coil layer is formed directly on the planarizing insulator layer extending backward in the direction of height or on the gap layer formed on the planarizing insulator layer.

10. (Original) A thin-film magnetic head according to claim 8, wherein the lower magnetic pole layer is higher in saturation flux density than the lower magnetic core layer.

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11. (Original) A thin-film magnetic head according to claim 8, wherein the lower magnetic pole layer comprises a laminate of at least two magnetic layers and wherein a magnetic layer closer to the gap layer has a higher saturation flux density.

12. (Currently Amended) A thin-film magnetic head according to claim 8, wherein the upper magnetic core layer on the front end portion thereof comprises a laminate of at least two magnetic layers, and wherein a magnetic layer closer to the gap layer has a higher saturation flux density.

13. (New) The method for manufacturing a thin film magnetic head, according to claim 7, further comprising a step of using anisotropic etching to remove the gap layer extending from the base end of the upper magnetic core layer to the track width direction.

14. (New) The method of manufacturing a thin-film magnetic head, according to claim 7, further comprising a step of using an ion milling to cut the top surface of the lower magnetic pole layer on both sides in the track width direction.

15. (New) The method of manufacturing a thin-film magnetic head, according to claim 14, wherein an angle θ1 of ion irradiation in the ion milling is not less than 0 degrees and not greater than 30 degrees.

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16. (New) The method of manufacturing a thin-film magnetic head, according to claim 14, further comprising a step in which, by performing second ion milling after the ion milling as set forth in claim 15, an inclined surface is formed on the top surfaces in the track width direction of the lower magnetic core, and the width dimensions of the upper magnetic core layer, the gap layer, and the lower magnetic pole layer define a track width.

17. (New) The method of manufacturing a thin-film magnetic head, according to claim 16, wherein an angle θ2 of ion irradiation in the second ion milling is not less than 45 degrees and not greater than 70 degree.

18. (New) The thin-film magnetic head according to claim 1, wherein, on the lower magnetic pole layer, sloping surfaces inclined and spaced apart on both sides in the track width direction from the pole region of the upper magnetic core layer.

19. (New) The thin-film magnetic head according to claim 18, wherein, on the lower magnetic pole layer, slopping surfaces inclined and spaced apart on both sides in the track width direction from the pole region of the upper magnetic core layer.

20. (New) The thin-film magnetic head according to claim 1,wherein the thickness of the lower magnetic pole layer is 30% to 70 % of the overall thickness of the lower magnetic pole layer and the lower magnetic core layer.

21. (New) The thin-film magnetic head according to claim 8,wherein the

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thickness of the lower magnetic pole layer is 30% to 70 % of the overall thickness of the lower magnetic pole layer and the lower magnetic core layer.